

Amendments to the claims:

1. (Currently Amended) A protein comprising an the amino acid sequence ~~selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, and SEQ ID NO: 10.~~

2. (Currently Amended) A protein functionally equivalent to a protein comprising an the amino acid sequence ~~selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, and SEQ ID NO: 10,~~ wherein said protein is selected from the group of (a) and (b), wherein:

(a) is a protein comprising an the amino acid sequence ~~selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, and SEQ ID NO: 10,~~ wherein ~~one or more~~ up to 30 amino acids are deleted, added, inserted and/or substituted with different amino acids; and

(b) is a protein encoded by DNA that hybridizes under the stringent conditions of 42°C, 2x SSC, 0.1% SDS to the complement of a DNA comprising a the nucleotide sequence ~~selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, and SEQ ID NO: 9.~~

3. (Original) A partial peptide of the protein according to any one of claims 1 and 2.

4. (Original) A fusion protein comprising the first protein according to any one of claims 1 and 2, fused with a second peptide.

5. (Withdrawn) A DNA molecule encoding the protein according to any one of claims 1 to 3.

6. (Withdrawn) A vector into which the DNA according to claim 5 is inserted.

7. (Withdrawn) A transformant having the DNA according to claim 5 in an expressible form.

8. (Withdrawn) A method for producing the protein according to any one of claims 1 to 3, said method comprising the steps of: culturing the transformant according to claim 7, and recovering the expressed protein from the transformant or the culture supernatant thereof.

9. (Withdrawn) A method of screening for a substrate of the protein according to any of claims 1 and 2, said method comprising the following steps of:

(a) contacting a test sample with said protein;

(b) detecting the protease activity of said protein against the test sample; and

(c) selecting a compound that is digested or cleaved by said protease activity.

10. (Withdrawn) A substrate of the protein according to any of claims 1 and 2, wherein said substrate can be isolated by the method according to claim 9.

11. (Withdrawn) A method of screening for a compound capable of inhibiting the activity of the protein according to any of claims 1 and 2, said method comprising the following steps of:

(a) contacting the protein with the substrate of claim 10 in the presence of a test sample;

(b) detecting the protease activity of the protein against the substrate; and

(c) selecting a compound that reduces the protease activity relative to the protease activity detected in the absence of the test sample.

12. (Withdrawn) A compound that inhibits the activity of the protein according to any of claims 1 and 2, wherein said compound can be isolated by the method according to claim

11.

13. (Withdrawn) An antibody that binds to the protein according to any of claims 1 and 2.

14. (Withdrawn) A method for detecting or assaying the protein according to any of claims 1 and 2, said method comprising the steps of: contacting the antibody according to claim 13 with a test sample that is anticipated to contain the protein; and detecting or assaying formation of the immune-complex between the antibody and the protein.

15. (Withdrawn) A nucleotide sequence specifically hybridizing to the DNA comprising the nucleotide sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, and SEQ ID NO: 9, wherein the nucleotide sequence is at least 15 nucleotide in length.